

# **Air Quality Permitting Statement of Basis**

October 18, 2006

Tier I Operating Permit No. T1-060118

TransCanada GTN System, Athol

Facility ID No. 055-00033

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**PUBLIC COMMENT** 

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# Acronyms, Units, and Chemical Nomenclatures

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region
CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality
EPA U.S. Environmental Protection Agency

HAPs Hazardous Air Pollutants

hp horsepower

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance

with the Idaho Administrative Procedures Act

MACT Maximum Achievable Control Technology

NESHAP National Emission Standards for Hazardous Air Pollutants

NO<sub>2</sub> nitrogen dioxide NO<sub>x</sub> nitrogen oxides

NSPS New Source Performance Standards

 $O_3$  ozone

PM particulate matter

 $PM_{10}$  particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

PSD Prevention of Significant Deterioration

PTC permit to construct

Rules Rules for the Control of Air Pollution in Idaho

SIP State Implementation Plan

 $SO_2$  sulfur dioxide  $SO_x$  sulfur oxides T/yr tons per year

UTM Universal Transverse Mercator

VOC volatile organic compound

#### 1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.362, Rules for the Control of Air Pollution in Idaho, for issuing Tier I operating permits.

This permit is a Tier I renewal for existing Tier I Operating Permit No. 055-00033 which was issued December 27, 2001. This permit also incorporates administrative changes, which include the responsible official and corporate mailing address for the facility.

#### 2. FACILITY DESCRIPTION

TransCanada GTN System (TransCanada) operates a network of compressor stations that transmit natural gas from Canada to California along an underground pipeline system. The pipeline enters the United States in northern Idaho, continues through southeastern Washington and central Oregon, and enters California at its northern border. The network consists of 12 compressor stations located along the pipeline, all of which are designed for remote unattended operation from TransCanada's Gas Dispatch Center in Portland, Oregon. Each compressor station consists of one or more turbine-driven compressors that transport the natural gas through the pipeline. The turbines use the natural gas in the pipeline as fuel and provide energy for the compressors.

Compressor Station No. 5, located about 2.9 miles southwest of Athol, Idaho, on Highway 54, uses two turbines to power the compressors. The turbines are referenced as Unit 5B and Unit 5C. Unit 5B is a Cooper Rolls Coberra 125 turbine and is rated at 14,300 hp. Unit 5C is a Cooper Rolls Coberra 6000 with DLE Combustor (RB211) and is rated at 35,000 hp. Both turbines have an individual stack.

Unit 5B was installed in 1970, prior to NSPS requirements, and has not been modified or reconstructed. Unit 5B is subject to applicable requirements such as visible emissions and grain loading standards which have been clarified in the permit.

#### 3. FACILITY / AREA CLASSIFICATION

This facility is classified as a major facility by IDAPA 58.01.01.008.10, because it emits or has the potential to emit a regulated air pollutant in amounts greater than or equal to 100 tons per year. This facility is no longer a major facility as defined by IDAPA 58.01.01.205, because it does not emit or have the potential to emit a regulated air pollutant in amounts greater than or equal to 250 tons per year (PTE is limited by the DLE Combustor installed in 1995). This facility is not a designated facility as defined by IDAPA 58.01.01.006.26. This facility is subject to federal NSPS requirements in accordance with 40 CFR 60.

The facility is located within AQCR 62 and UTM zone 11. The facility is located in Kootenai County which is designated unclassifiable for all federal and state criteria pollutants.

The AIRS information provided in Section 8 of this statement of basis defines the classification for each regulated air pollutant at TransCanada. This required information is entered into the EPA AIRs database.

#### 4. APPLICATION SCOPE

TransCanada has submitted an application to renew its existing Tier I operating permit No. 055-00033, which was issued on December, 27, 2001.

TransCanada has undergone two name changes and has the following permitting history:

June 14, 2000 DEQ issued Permit to Construct under AIRS No. 055-00033.

December 27, 2001 DEQ issued PG&E a Tier I operating permit under AIRS

No. 055-00033.

March 13, 2006 DEQ declared completeness for a Tier I administrative amendment

Permit No. TI-050102 requesting a change in the responsible official and the corporate office address. These changes have been incorporated

into this Tier I renewal.

### 4.1 Application Chronology

May 5, 2006 Tier I renewal Permit No. TI-060118 application received by DEQ.

June 20, 2006 Application determined complete.

October 23, 2006 DEQ provided draft permit to the facility and the DEQ's Coeur d'Alene

Regional Office for review and comment.

November 3, 2006 Draft for public comment

#### 5. PERMIT ANALYSIS

# 5.1 Emissions Inventory

No emissions inventory was necessary for this permit renewal, because emissions are not increasing. Refer to the technical memorandum developed for Tier I Operating Permit No. 055-00033, issued December 27, 2001, for emissions information. No physical modifications have been made to the facility since the previous Tier 1 operating permit was issued.

#### 5.2 Modeling

Modeling is not required for Tier 1 operating permits per IDAPA 58.01.01.300.

#### 5.3 Regulatory Review

Please refer to the technical memorandum developed for Tier I Operating Permit No. 055-00033, issued December 27, 2001.

The compliance assurance monitoring rule in 40 CFR 64 is a new regulation since the earlier technical memoranda were developed. During investigation of TransCanada, Athol for applicability to this rule, it was determined that there is no pollution control equipment to make the facility applicable to this rule. Emissions are controlled by dry low-NO<sub>x</sub> combustion, achieved by reducing peak flame temperature and employing lean pre-mixed combustion. However, "control device" in the rule refers to literal control equipment, so compliance assurance monitoring does not apply to this facility.

#### 5.4 Fee Review

The TransCanada facility is a major facility as defined in IDAPA 58.01.01.008.10 and is therefore subject to registration and registration fees in accordance with IDAPA 58.01.01.387. The facility is current with its registration fees.

#### 6. PERMIT CONDITIONS

For Unit 5B, Section 3 is a new permit section to specifically address the following applicable requirements:

- 3.1 Grainloading standard in accordance with IDAPA 58.01.01.677,
- 3.2 Visible emissions in accordance with IDAPA 58.01.01.625,
- 3.3 Natural gas fired to demonstrate compliance with IDAPA 58.01.01.625 and .677,
- 3.4 Monitor and record natural gas burned to demonstrate compliance with IDAPA 58.01.01.625 and .677.
- 3.5 Notification of engine replacement in accordance with 40 CFR 60.15.

No other changes to existing permit conditions have been made, with the exception of numbering due to formatting changes. Table 6.1 provides the cross reference between the renewal and the Tier I operating permit issued December 27, 2001.

**Table 6.1 PERMIT NUMBERING CROSS REFERENCE** 

Permit numbering in Tier I operating permit issued December 27, 2001	Permit numbering in the Renewal	Permit numbering in Tier I operating permit issued December 27, 2001	Permit numbering in the Renewal	Permit numbering in Tier I operating permit issued December 27, 2001	Permit numbering in the Renewal
1.1	2.1	1.25	2.25	4.5	6.5
1.2	2.2	1.26	2.26	4.6	6.6
1.3	2.3	1.27	2.27	4.7	6.7
1.4	2.4	2.1	4.1	4.8	6.8
1.5	2.5	2.2	4.2	4.9	6.9
1.6	2.6	2.3	4.3	4.10	6.10
1.7	2.7	2.4	4.4	4.11	6.11
1.8	2.8	2.5	4.5	4.12	6.12
1.9	2.9	2.6	4.6	4.13	6.13
1.10	2.10	2.7	4.7	4.14	6.14
1.11	2.11	2.8	4.8	4.15	6.15
1.12	2.12	2.9	4.9	4.16	6.16
1.13	2.13	2.10	410	4.17	6.17
1.14	2.14	2.11	4.11	4.18	6.18
1.15	2.15	2.12	4.12	4.19	6.19
1.16	2.16	2.13	4.13	4.20	6.20
1.17	2.17	2.14	4.14	4.21	6.21
1.18	2.18	2.15	4.15	4.22	6.22
1.19	2.19	2.16	4.16	4.23	6.23
1.20	2.20	3.1	5.1	4.24	6.24
1.21	2.21	4.1	6.1	4.25	6.25
1.22	2.22	4.2	6.2	4.26	6.26
1.23	2.23	4.3	6.3	4.27	6.27
1.24	2.24	4.4	6.4		

With the use of standard facility-wide conditions and general provisions, there are minor differences between the renewal and the Tier I operating permit issued December 27, 2001, for the facility-wide conditions and general provisions. They are listed in the following sections.

#### 6.1 Facility-Wide Conditions

To be consistent with current standard facility-wide conditions, "Unless specified elsewhere in this permit" is deleted from Permit Conditions 2.2, 2.3, 2.4, 2.6, 2.8, and 2.9. "Federally enforceable; however, this provision will become state-only enforceable upon removal from the SIP" is deleted from the citation of Permit Conditions 2.5 and 2.9.5. Permit Conditions 2.8 and 2.16 are reworded. "Department" is replaced with "DEQ".

#### 6.2 General Provisions

To be consistent with current standard general provisions, the effective date of the regulation is added to the citation for each permit condition. "Section 213 is a State Only requirement, but has been submitted to EPA for federal approval" is removed from the citation of General Provision No.10. General Provision No. 16 about fees is revised as "The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397". A specified reporting period of "from January 1 to December 31" is added to General Provision No. 21.a. Specified reporting periods of "from January 1 to June 30" and "from July 1 to December 31" are added to General Provision No. 24. General Provisions conditions have been renumbered.

#### 7. PERMIT REVIEW

## 7.1 Facility Review of Draft Permit

A facility draft permit was issued to the facility on October 23, 2006. Minor comments were received and incorporated into the permit.

# 7.2 Regional Office Review of Draft Permit

A facility draft permit was provided to DEQ's Coeur' d Alene Regional Office on October 23, 2006. No comments were received from the regional office.

#### 7.3 Public Comment

A public comment will be provided as required by IDAPA 58.01.01.364.

#### 8. AIRS

No changes have been made in the AIRS database classifications.